

WHAT IS CLAIMED IS:

1. An oscillator comprising:
a resonant circuit generating a resonant signal;
5 a drive circuit that feeds back the resonant
signal to the resonant circuit; and
an output terminal connected to a given node of
the resonant circuit, an oscillation signal of the
oscillator being output via the output terminal.
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2. The oscillator as claimed in claim 1,
wherein:
the resonant circuit includes an inductor; and
the output terminal is connected to one end of
15 the inductor.
3. The oscillator as claimed in claim 1,
wherein:
the resonant circuit includes an inductor; and
20 the output terminal is connected to an
intermediate node of the inductor located between two
ends of the inductor.
4. The oscillator as claimed in claim 1,
25 further comprising a matching circuit including a
capacitor connected to the resonant circuit via the
output terminal of the oscillator.
5. The oscillator as claimed in claim 1,
30 further comprising:
a matching circuit including a capacitor
connected to the resonant circuit via the output
terminal of the oscillator; and
a substrate on which the resonant circuit and the
35 drive circuit are formed,
the capacitor of the matching circuit including a
conductive pattern provided to the substrate.

6. The oscillator as claimed in claim 1,
further comprising:

5 a matching circuit including a capacitor
connected to the resonant circuit via the output
terminal of the oscillator; and

a substrate on which the resonant circuit and the
drive circuit are formed,

10 the capacitor of the matching circuit including
conductive patterns that are provided to the substrate
and face each other.

7. The oscillator as claimed in claim 1,
wherein:

15 the resonant circuit includes an inductor; and
the drive circuit comprises a transistor having a
base that receives the resonant signal, a collector
receiving a power supply voltage, and an emitter
connected to the inductor of the resonant circuit.

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8. The oscillator as claimed in claim 1,
wherein:

the resonant circuit includes an inductor;

25 the drive circuit comprises a transistor having a
base that receives the resonant signal, a collector
receiving a power supply voltage, and an emitter
coupled to the inductor of the resonant circuit via an
emitter bias resistor.

30. 9. The oscillator as claimed in claim 1,
wherein:

the resonant circuit includes an inductor;

35 the drive circuit comprises a transistor having a
base that receives the resonant signal, a collector
receiving a power supply voltage, and an emitter
coupled to the inductor of the resonant circuit; and
the oscillator further comprises a matching

circuit having a capacitor coupled to the emitter of the drive circuit.

10. The oscillator as claimed in claim 1,
5 wherein:

the resonant circuit includes an inductor;
the drive circuit comprises a transistor having a
base that receives the resonant signal, a collector
receiving a power supply voltage, and an emitter
10 coupled to the inductor of the resonant circuit; and
the oscillator further comprises a matching
circuit having a capacitor coupled to the inductor via
the output terminal.

15 11. The oscillator as claimed in claim 1,
wherein the resonant circuit includes an inductor
formed by a transmission line.

20 12. The oscillator as claimed in claim 1,
wherein the resonant circuit includes an inductor
formed by a micro stripline.

25 13. The oscillator as claimed in claim 1,
wherein the resonant circuit includes a variable
capacitance diode that receives a control signal via a
control terminal of the oscillator, so that an
oscillation frequency can be adjusted externally.